ABSTRACT

VOLTAGE REGULATION IN AN INTEGRATED CIRCUIT

5 The invention relates to power regulation of integrated circuits such as microprocessors. It suggests measuring instantaneous power consumption inside of the integrated circuit (13), by sensing state changes of the transistors of the units (14, 16, 18 20, 22) of the circuit. Based on the sensed power consumption, an instantaneous power consumption for the whole circuit may be computed and transmitted to a voltage regulator (27). The voltage regulator changes the voltage according to the computed power consumption; the regulator may thus precompensate power surges, and limit voltage transients.

Figure 3.

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